

C1038

Total Pages : 3

Roll No.

MCS-E6

Artificial Intelligence

Master of Computer Application (MCA)

4th Semester Examination, 2022 (June)

Time : 2 Hours]

Max. Marks : 80

Note : This paper is of Eighty (80) marks divided into two (02) Sections A and B. Attempt the questions contained in these sections according to the detailed instructions given therein.

SECTION-A

(Long Answer Type Questions)

Note : Section 'A' contains Five (05) long answer type questions of Twenty (20) marks each. Learners are required to answer any Two (02) questions only.

(2×20=40)

1. Explain with neat diagram the architecture of expert system and mention its features.

2. Explain in detail about forward and backward chaining with an example.
3. Discuss in detail the process of machine learning with an example.
4. What is meant by a “Knowledge-Based System”? Describe the basic components of a knowledge based system. Also mention the various levels of knowledge representation.
5. Explain A* algorithm with example.

SECTION-B

(Short Answer Type Questions)

Note : Section 'B' contains Eight (08) short answer type questions of Ten (10) marks each. Learners are required to answer any Four (04) questions only. (4×10=40)

1. Define AI. What is its importance in the field of computing?
2. Write the difference between supervised learning and unsupervised learning.
3. Explain the basic components of an expert system.
4. Explain neural network architecture in detail.

5. Explain briefly the characteristics and properties of ANN.
 6. Define rule based system with example.
 7. Explain the Best First and Depth First search method.
 8. What is meant by Natural Language Processing (NLP)? Describe various components of NLP in detail.
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